Case 1:24-cv-00579-JNR Document 105-1 Filed 06/25/25 Page 1 of 34 PageID #:

EXHIBIT A

DISPUTED CONSTRUCTIONS

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
1.	'207 7	The light emitting diode of claim 6, wherein the electrode pad is arranged directly on an upper surface of the transparent electrode layer outside of the opening.	Plain and ordinary meaning, or alternatively the electrode pad contacts the upper surface of the transparent electrode layer outside of the opening Figs. 1, 3, 4; 2:51-67; 3:9-19; 3:36-60; 4:4-11; 4:66-5:10	Indefinite '207 Patent at 1:25-31, 1:43-50, 1:54-55, 2:5-15, 2:63-67, 3:61-4:1, 4:7-11, 4:66-5:10, FIGS. 1, 3, 4, Claims 1, 6, 7.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
2.	'800 1,6,7,14,17,19	low-doped layer	Plain and ordinary meaning, or alternatively <u>Claim 1.</u> a semiconductor layer containing a dopant [wherein the dopant concentration is less than a dopant concentration of the at least one intermediate doped layer] ¹ <u>Claim 14.</u> a semiconductor layer containing a dopant [wherein the dopant concentration is less than that of the doped layer] Figs. 1, 2, 4:21-36; 5:23-67; 6:13-67; 7:1-38; 8:43-64	Indefinite, or "a layer having a dopant concentration less than 1 x 10 ¹⁸ /cm ³ " '800 Patent at 1:52-67, 2:5-6, 2:32-35, 2:38-41, 3:6-11, 3:21-25, 3:44-52, 5:25-26, 5:54-61, 6:52-67, 8:31-9:6, 9:30-33, FIG. 2, Claims 1, 2, 6-12, 14, 19, 20.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
3.	'800 1,7,8	intermediate doped layer	Plain and ordinary meaning, or alternatively	Indefinite, or "a layer located between the first and second low doped layers and	Construction of this term may impact validity/invalidity and/or

¹ Single [brackets] in the proposed construction column indicate terms or phrases used elsewhere in the claim that expressly define the selected term, but that do not require separate construction.

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			a semiconductor layer containing a dopant, which is located between the first and second low-doped layers Figs. 1, 2, 4:21-36; 5:23-67; 6:13-67; 7:1-38; 8:43-64	having a dopant concentration from 1×10 ¹⁸ /cm³ to 1×10 ²⁰ /cm³" '800 Patent at 1:62-67, 3:6-11, 5:54-61, 6:46-67, 7:25-28, 7:39-46, 8:50-64, FIG. 2, Claims 1, 2, 9, 12, 14.	infringement/non-infringement, and may assist the jury.
4.	'800 14-17,19,20	doped layer	Plain and ordinary meaning, or alternatively a semiconductor layer containing a dopant Figs. 1, 2, 4:21-36; 5:23-67; 6:13-67; 7:1-38; 8:43-64	Indefinite, or "a layer having a dopant concentration from 1×10 ¹⁸ /cm³ to 1×10 ²⁰ /cm³" '800 Patent at 1:62-67, 3:6-11, 5:54-61, 6:46-67, 7:25-28, 7:39-46, 8:50-64, FIG. 2, Claims 1, 2, 9, 12, 14.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
5.	'800 14	first and second low-doped layers and the second low-doped layers include a hole concentration	The phrase "the second low-doped layers" is a typographical error and should be read as "the second low-doped layer" Figs. 1, 2, 4:21-36; 5:23-67; 6:13-67; 7:1-38; 8:43-64; File History at SEOUL 001235-44	"first and second low-doped layers and the more than one second low-doped layers include a hole concentration" '800 Patent at Claims 1, 14. '800 Patent File History at TCP-SEOUL-00007295 – 00007304, TCP-SEOUL-00007315 – 00007318.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
6.	'050 1,2	groove	Plain and ordinary meaning, or alternatively — a set of long narrow channels or depressions [each having a triangular cross-section] Fig. 2, 3, 4, 5, 8; 2:30-44; 4:47-64	"opening formed in a surface of an object that reduces the thickness of the object within the opening" '050 Patent at 2:30-44, 2:57-3:17, 3:25-39, 4:16-40, 4:47-64, 6:1-8, FIGS. 1–8, Claims 1-4, 6, 9, 12, 13.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				'050 Patent File History at TCP-SEOUL- 00005167 – 5169, TCP-SEOUL- 00005323 – 5330, TCP-SEOUL- 00005381 – 5388.	
				U.S. Patent No. 8,319,248 File History at TCP-SEOUL-00008148 – 8180, TCP-SEOUL-00008269 – 8274, TCP-SEOUL-00008288 – 8297.	
				U.S. Patent No. 9,530,942 File History at TCP-SEOUL-00009244 – 9251, TCP-SEOUL-00009268 – 9275, TCP-SEOUL-00009279 – 9290, TCP-SEOUL-00009303 – 9310, TCP-SEOUL-00009332 – 9339, TCP-SEOUL-00009347 – 9353.	
				U.S. Patent No. 9,412,913 File History at TCP-SEOUL-00009002 – 9009, TCP-SEOUL-00009034 – 9041, TCP-SEOUL-00009045 – 9053, TCP-SEOUL-00009059 – 9065, TCP-SEOUL-00009090 – 9096, TCP-SEOUL-00009107 – 9113.	
7.	'050 1,12	sub-groove(s)	Plain and ordinary meaning, or alternatively plurality of sub-grooves - a set of long narrow channels or depressions Fig. 2, 3, 4, 5, 8; 2:30-44; 4:47-64; File	"opening(s) formed within a groove formed in a surface of an object that reduce(s) the thickness of the object within the opening(s)" '050 Patent at 2:30-44, 2:57-3:17, 3:25-39, 4:16-40, 4:47-64, 6:1-8, FIGS. 1–8,	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			History at SEOUL 000553-55; 000564-71	Claims 1-4, 6, 9, 12, 13. '050 Patent File History at TCP-SEOUL- 00005167 – 5169, TCP-SEOUL- 00005323 – 5330, TCP-SEOUL- 00005381 – 5388. U.S. Patent No. 8,319,248 File History at TCP-SEOUL-00008148 – 8180, TCP- SEOUL-00008269 – 8274, TCP-SEOUL-	
				00008288 – 8297. U.S. Patent No. 9,530,942 File History at TCP-SEOUL-00009244 – 9251, TCP-SEOUL-00009268 – 9275, TCP-SEOUL-00009279 – 9290, TCP-SEOUL-00009303 – 9310, TCP-SEOUL-00009332 – 9339, TCP-SEOUL-00009347 – 9353.	
				U.S. Patent No. 9,412,913 File History at TCP-SEOUL-00009002 – 9009, TCP-SEOUL-00009034 – 9041, TCP-SEOUL-00009045 – 9053, TCP-SEOUL-00009059 – 9065, TCP-SEOUL-00009090 – 9096, TCP-SEOUL-00009107 – 9113.	
8.	'821 1,5	at least one of the sidewalls comprising an inset sidewall partially defining an outer fixing space	Plain and ordinary meaning, or alternatively one or more of the sidewalls contains an overhang, with the space	Indefinite '821 Patent at Abstract, 1:19-24, 1:59- 2:18, 2:30-48, 3:11-47, 3:57-4:7, 4:23-55, 4:59-65, 5:24-65, FIGS. 1, 2, 3A, 3B, 4, 5,	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
		under the overhang being part of an outer fixing space ² Figs. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7, 8, 1:59-2:15; 3:11-47; 4:29-50; 5:13-35	6A, 6B, 7-9, Claims 1, 3–6, 9–11. '821 Patent File History at TCP-SEOUL-00005666 – 5671, TCP-SEOUL-00005683 – 5690, TCP-SEOUL-00005694 – 5701. '967 Patent File History at TCP-SEOUL-00005781 – 5788, TCP-SEOUL-00005841 – 5850, TCP-SEOUL-00005862 – 5871, TCP-SEOUL-00005910 – 5924, TCP-SEOUL-00005956 – 5968, TCP-SEOUL-00005956 – 5968, TCP-SEOUL-00005971 – 5990, TCP-SEOUL-00006027 – 6045. Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 7 (Patent Owner's Preliminary Response Under 37 C.F.R. § 42.107), 10-28, 37-61 (P.T.A.B. May 12, 2020) [TCP-SEOUL-00009847 – 9917]. Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 8 (Decision Granting Institution of Inter Partes Review Under 35 U.S.C. § 314), 8-26 (P.T.A.B. Aug. 10, 2020) [TCP-SEOUL-00009918 – 9949].	Requesting a Construction
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 17	

_

² Italics in the Proposed Construction column indicate that the term is separately construed, with that construction being incorporated into the current term.

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			(Patent Owner Response), 4-13, 27-33, 59-80 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009624 – 9712].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 19 (Patent Owner's Motion to Amend Under 37 C.F.R. § 42.121), 4-25 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009713 – 9749].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 32 (Preliminary Guidance Patent Owner's Motion to Amend), 5-11 (P.T.A.B. Mar. 4, 2021) [TCP-SEOUL-00009750 – 9761].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 43 (Patent Owner's Sur-Reply to Petitioner's Reply to Board's Preliminary Guidance Patent Owner's Motion to Amend), 2-12 (P.T.A.B. Apr. 26, 2021) [TCP-SEOUL-00009762 – 9784].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 47 (Final Written Decision), 3-5, 9-37, 44-58 (P.T.A.B. Jul. 21, 2021) [TCP-SEOUL-00009785 – 9846].	

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				TCP-SEOUL-00008821 – 8832, TCP- SEOUL-00008847 – 8857, TCP-SEOUL- 00008861 – 8868.	
				U.S. Patent No. 8,558,270 File History at TCP-SEOUL-00008553 – 8561, TCP-SEOUL-00008592 – 8603, TCP-SEOUL-00008715 – 8723, TCP-SEOUL-00008727 – 8734.	
				U.S. Patent No. 7,964,943 File History at TCP-SEOUL-00008010 – 8019, TCP-SEOUL-00008027 – 8039, TCP-SEOUL-00008042, TCP-SEOUL-00008044 – 8051.	
				U.S. Reissue Patent Application No. 16/953,254 File History at TCP-SEOUL-00009401, TCP-SEOUL-00009439 – 9471, TCP-SEOUL-00009557 – 9617.	
9.	'821 1,2,5	fixing space	Plain and ordinary meaning, or alternatively <u>outer fixing space</u> - a space that includes the area under the	"opening perforating and/or formed through a body in a vertical direction (i.e., a direction normal to the surface of a light-emitting diode chip)"	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
			overhang of the [inset sidewall] inner fixing space - an opening extending from the [first surface] to the [second surface]	'821 Patent at Abstract, 1:19-24, 1:59-2:18, 2:30-48, 3:11-47, 3:57-4:7, 4:23-55, 4:59-65, 5:24-65, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Claims 1–6, 9, 10.	
			Figs. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7, 8,	'821 Patent File History at TCP-SEOUL- 00005666 – 5671, TCP-SEOUL-	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
		1:59-2:15; 3:11-47; 4:29-50; 5:13-35	00005683 – 5690, TCP-SEOUL- 00005694 – 5701.	
			'967 Patent at Abstract, 1:26-31, 1:66-2:18, 2:29-31, 2:43-61, 3:25-63, 4:6-23, 4:39-5:5, 5:9-15, 5:43-6:19, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Original Claims 1, 2, 6, 9, 10, 14, Amended Claims 17-22.	
			'967 Patent File History at TCP-SEOUL-00005781 – 5788, TCP-SEOUL-00005841 – 5850, TCP-SEOUL-00005910 – 5924, TCP-SEOUL-00005956 – 5968, TCP-SEOUL-0005971 – 5990, TCP-SEOUL-00006027 – 6045, TCP-SEOUL-00006100 – 6131, TCP-SEOUL-00006133 – 6136.	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 7 (Patent Owner's Preliminary Response Under 37 C.F.R. § 42.107), 10-28, 37-61 (P.T.A.B. May 12, 2020) [TCP-SEOUL-00009847 – 9917].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 8 (Decision Granting Institution of Inter Partes Review Under 35 U.S.C. § 314), 8-26 (P.T.A.B. Aug. 10, 2020) [TCP-SEOUL-00009918 – 9949].	
			Satco Prods., Inc. v. Seoul Semiconductor	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			Co., Ltd., No. IPR2020-00410, Paper 17 (Patent Owner Response), 4-13, 27-33, 59-80 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009624 – 9712].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 19 (Patent Owner's Motion to Amend Under 37 C.F.R. § 42.121), 4-25 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009713 – 9749].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 32 (Preliminary Guidance Patent Owner's Motion to Amend), 5-11 (P.T.A.B. Mar. 4, 2021) [TCP-SEOUL-00009750 – 9761].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 43 (Patent Owner's Sur-Reply to Petitioner's Reply to Board's Preliminary Guidance Patent Owner's Motion to Amend), 2-12 (P.T.A.B. Apr. 26, 2021) [TCP-SEOUL-00009762 – 9784].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 47 (Final Written Decision), 3-5, 9-37, 44-58 (P.T.A.B. Jul. 21, 2021) [TCP-SEOUL-00009785 – 9846].	

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				U.S. Patent No. 8,829,552 File History at TCP-SEOUL-00008821 – 8832, TCP-SEOUL-00008847 – 8857, TCP-SEOUL-00008861 – 8868.	
				U.S. Patent No. 8,558,270 File History at TCP-SEOUL-00008553 – 8561, TCP-SEOUL-00008592 – 8603, TCP-SEOUL-00008715 – 8723, TCP-SEOUL-00008727 – 8734.	
				U.S. Patent No. 7,964,943 File History at TCP-SEOUL-00008010 – 8019, TCP-SEOUL-00008027 – 8039, TCP-SEOUL-00008042, TCP-SEOUL-00008044 – 8051.	
				U.S. Reissue Patent Application No. 16/953,254 File History at TCP-SEOUL-00009401, TCP-SEOUL-00009439 – 9471, TCP-SEOUL-00009557 – 9617.	
10.	'821 5	fixing hole	Plain and ordinary meaning, or alternatively [inner fixing space filled by the resin]	"opening perforating and/or formed through a body in a vertical direction (i.e., a direction normal to the surface of a light-emitting diode chip) and surrounded by the body"	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
			Figs. 4, 5, 6A, 6B; 7, 8, 1:59-6; 4:29-51	'821 Patent at Abstract, 1:19-24, 1:59-2:18, 2:30-48, 3:11-47, 3:57-4:7, 4:23-55, 4:59-65, 5:24-65, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Claims 2–13.	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			'821 Patent File History at TCP-SEOUL- 00005666 – 5671, TCP-SEOUL- 00005683 – 5690, TCP-SEOUL- 00005694 – 5701.	
			'967 Patent at Abstract, 1:26-31, 1:66-2:18, 2:29-31, 2:43-61, 3:25-63, 4:6-23, 4:39-5:5, 5:9-15, 5:43-6:19, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Original Claims 1, 2, 6, 9, 10, 14, Amended Claims 17-22.	
			'967 Patent File History at TCP-SEOUL- 00005781 – 5788, TCP-SEOUL- 00005841 – 5850, TCP-SEOUL- 00005910 – 5924, TCP-SEOUL- 00006133 – 6136.	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 7 (Patent Owner's Preliminary Response Under 37 C.F.R. § 42.107), 10-28, 37-61 (P.T.A.B. May 12, 2020) [TCP-SEOUL-00009847 – 9917].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 8 (Decision Granting Institution of Inter Partes Review Under 35 U.S.C. § 314), 8-26 (P.T.A.B. Aug. 10, 2020) [TCP-SEOUL-00009918 – 9949].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 17	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			(Patent Owner Response), 4-13, 27-33, 59-80 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009624 – 9712].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 19 (Patent Owner's Motion to Amend Under 37 C.F.R. § 42.121), 4-25 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009713 – 9749].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 32 (Preliminary Guidance Patent Owner's Motion to Amend), 5-11 (P.T.A.B. Mar. 4, 2021) [TCP-SEOUL-00009750 – 9761].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 43 (Patent Owner's Sur-Reply to Petitioner's Reply to Board's Preliminary Guidance Patent Owner's Motion to Amend), 2-12 (P.T.A.B. Apr. 26, 2021) [TCP-SEOUL-00009762 – 9784].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 47 (Final Written Decision), 3-5, 9-37, 44-58 (P.T.A.B. Jul. 21, 2021) [TCP-SEOUL-00009785 – 9846]. U.S. Patent No. 8,829,552 File History at	

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				TCP-SEOUL-00008821 – 8832, TCP- SEOUL-00008847 – 8857, TCP-SEOUL- 00008861 – 8868.	
				U.S. Patent No. 8,558,270 File History at TCP-SEOUL-00008553 – 8561, TCP-SEOUL-00008592 – 8603.	
				U.S. Patent No. 7,964,943 File History at TCP-SEOUL-00008010 – 8019, TCP-SEOUL-00008027 – 8039, TCP-SEOUL-00008042.	
				U.S. Reissue Patent Application No. 16/953,254 File History at TCP-SEOUL-00009401, TCP-SEOUL-00009439 – 9471, TCP-SEOUL-00009557 – 9617.	
11.	'967 17,20	fixing space	Plain and ordinary meaning, or alternatively a space that includes the area under the overhang of the <i>undercut sidewall</i> Figs. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7, 8; 2:5-18; 3:25-63; File History at SEOUL 001785-816; 001840-43; 001867-85; 001946-58; Paper No. 47 in <i>Satco Products, Inc. v. Seoul Semiconductor</i> , IPR2020-00410	"opening perforating and/or formed through a body in a vertical direction (i.e., a direction normal to the surface of a light-emitting diode chip)" 821 Patent at Abstract, 1:19-24, 1:59-2:18, 2:30-48, 3:11-47, 3:57-4:7, 4:23-55, 4:59-65, 5:24-65, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Claims 1–6, 9, 10. '821 Patent File History at TCP-SEOUL-00005666 – 5671, TCP-SEOUL-00005683 – 5690, TCP-SEOUL-00005694 – 5701.	
				'967 Patent at Abstract, 1:26-31, 1:66-	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			2:18, 2:29-31, 2:43-61, 3:25-63, 4:6-23, 4:39-5:5, 5:9-15, 5:43-6:19, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Original Claims 1, 2, 6, 9, 10, 14, Amended Claims 17-22.	
			'967 Patent File History at TCP-SEOUL- 00005781 – 5788, TCP-SEOUL- 00005841 – 5850, TCP-SEOUL- 00005910 – 5924, TCP-SEOUL- 00005956 – 5968, TCP-SEOUL-0005971 – 5990, TCP-SEOUL-00006027 – 6045, TCP-SEOUL-00006100 – 6131, TCP- SEOUL-00006133 – 6136.	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 7 (Patent Owner's Preliminary Response Under 37 C.F.R. § 42.107), 10-28, 37-61 (P.T.A.B. May 12, 2020) [TCP-SEOUL-00009847 – 9917].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 8 (Decision Granting Institution of Inter Partes Review Under 35 U.S.C. § 314), 8-26 (P.T.A.B. Aug. 10, 2020) [TCP-SEOUL-00009918 – 9949].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 17 (Patent Owner Response), 4-13, 27-33, 59-80 (P.T.A.B. Nov. 16, 2020) [TCP-	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			SEOUL-00009624 – 9712].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 19 (Patent Owner's Motion to Amend Under 37 C.F.R. § 42.121), 4-25 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009713 – 9749].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 32 (Preliminary Guidance Patent Owner's Motion to Amend), 5-11 (P.T.A.B. Mar. 4, 2021) [TCP-SEOUL-00009750 – 9761].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 43 (Patent Owner's Sur-Reply to Petitioner's Reply to Board's Preliminary Guidance Patent Owner's Motion to Amend), 2-12 (P.T.A.B. Apr. 26, 2021) [TCP-SEOUL-00009762 – 9784].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 47 (Final Written Decision), 3-5, 9-37, 44-58 (P.T.A.B. Jul. 21, 2021) [TCP-SEOUL-00009785 – 9846].	
			U.S. Patent No. 8,829,552 File History at TCP-SEOUL-00008821 – 8832, TCP-SEOUL-00008847 – 8857, TCP-SEOUL-	

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				00008861 – 8868.	
				U.S. Patent No. 8,558,270 File History at TCP-SEOUL-00008553 – 8561, TCP-SEOUL-00008592 – 8603, TCP-SEOUL-00008715 – 8723, TCP-SEOUL-00008727 – 8734.	
				U.S. Patent No. 7,964,943 File History at TCP-SEOUL-00008010 – 8019, TCP-SEOUL-00008027 – 8039, TCP-SEOUL-00008042, TCP-SEOUL-00008044 – 8051.	
				U.S. Reissue Patent Application No. 16/953,254 File History at TCP-SEOUL-00009401, TCP-SEOUL-00009439 – 9471, TCP-SEOUL-00009557 – 9617.	
12.	'967 17,20	fixing hole	Plain and ordinary meaning, or alternatively a hole [located in the interior portion] of a lead frame having an [undercut sidewall]	"opening perforating and/or formed through a body in a vertical direction (i.e., a direction normal to the surface of a light-emitting diode chip) and surrounded by the body"	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
		Figs. 4, 5, 6A, 6B, 7, 8, 4:33-6 History at SEOUL 001785-81 001840-43; 001867-85; 00194	Figs. 4, 5, 6A, 6B, 7, 8, 4:33-67; File History at SEOUL 001785-816; 001840-43; 001867-85; 001946-58; Paper No. 47 in <i>Satco Products, Inc. v.</i>	'821 Patent at Abstract, 1:19-24, 1:59-2:18, 2:30-48, 3:11-47, 3:57-4:7, 4:23-55, 4:59-65, 5:24-65, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Claims 2–13.	
			Seoul Semiconductor, IPR2020-00410	'821 Patent File History at TCP-SEOUL- 00005666 – 5671, TCP-SEOUL- 00005683 – 5690, TCP-SEOUL-	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			00005694 – 5701.	
			'967 Patent at Abstract, 1:26-31, 1:66-2:18, 2:29-31, 2:43-61, 3:25-63, 4:6-23, 4:39-5:5, 5:9-15, 5:43-6:19, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Original Claims 1, 2, 6, 9, 10, 14, Amended Claims 17-22.	
			'967 Patent File History at TCP-SEOUL- 00005781 – 5788, TCP-SEOUL- 00005841 – 5850, TCP-SEOUL- 00005910 – 5924, TCP-SEOUL- 00006133 – 6136.	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 7 (Patent Owner's Preliminary Response Under 37 C.F.R. § 42.107), 10-28, 37-61 (P.T.A.B. May 12, 2020) [TCP-SEOUL-00009847 – 9917].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 8 (Decision Granting Institution of Inter Partes Review Under 35 U.S.C. § 314), 8-26 (P.T.A.B. Aug. 10, 2020) [TCP-SEOUL-00009918 – 9949].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 17 (Patent Owner Response), 4-13, 27-33, 59-80 (P.T.A.B. Nov. 16, 2020) [TCP-	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			SEOUL-00009624 – 9712].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 19 (Patent Owner's Motion to Amend Under 37 C.F.R. § 42.121), 4-25 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009713 – 9749].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 32 (Preliminary Guidance Patent Owner's Motion to Amend), 5-11 (P.T.A.B. Mar. 4, 2021) [TCP-SEOUL-00009750 – 9761].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 43 (Patent Owner's Sur-Reply to Petitioner's Reply to Board's Preliminary Guidance Patent Owner's Motion to Amend), 2-12 (P.T.A.B. Apr. 26, 2021) [TCP-SEOUL-00009762 – 9784].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 47 (Final Written Decision), 3-5, 9-37, 44-58 (P.T.A.B. Jul. 21, 2021) [TCP-SEOUL-00009785 – 9846].	
			U.S. Patent No. 8,829,552 File History at TCP-SEOUL-00008821 – 8832, TCP-SEOUL-00008847 – 8857, TCP-SEOUL-	

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				00008861 – 8868. U.S. Patent No. 8,558,270 File History at TCP-SEOUL-00008553 – 8561, TCP-SEOUL-00008592 – 8603. U.S. Patent No. 7,964,943 File History at TCP SEOUL 00008110 – 8010 TCP	
				TCP-SEOUL-00008010 – 8019, TCP-SEOUL-00008027 – 8039, TCP-SEOUL-00008042. U.S. Reissue Patent Application No. 16/953,254 File History at TCP-SEOUL-00009401, TCP-SEOUL-00009439 –	
13	'967 17,20	undercut sidewall(s)	Plain and ordinary meaning, or alternatively undercut sidewall - a sidewall having a structure consistent with material having been cut away from the underside so as to leave an overhanging portion in relief Figs. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7, 8; 2:5-18; 3:25-63; File History at SEOUL 001785-816; 001840-43; 001867-85; 001946-58; Paper No. 47 in Satco Products, Inc. v. Seoul Semiconductor, IPR2020-00410	9471, TCP-SEOUL-00009557 – 9617. "sidewall(s) located inwardly on the underside of an upper overhanging portion of a body" '967 Patent at Abstract, 2:5-15, 2:32, 2:43-61, 3:25-63, 4:45-67, 5:43-6:4, 6:13-19, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Original Claims 1, 9, Amended Claims 17, 20. '967 Patent File History at TCP-SEOUL-00005781 – 5788, TCP-SEOUL-00005841 – 5850, TCP-SEOUL-00005862 – 5871, TCP-SEOUL-00005910 – 5924, TCP-SEOUL-00005956 – 5968, TCP-SEOUL-00005971 – 5990, TCP-SEOUL-00006027 – 6045,	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			TCP-SEOUL-00006100 – 6131, TCP- SEOUL-00006133 – 6136.	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 7 (Patent Owner's Preliminary Response Under 37 C.F.R. § 42.107), 10-28, 37-61 (P.T.A.B. May 12, 2020) [TCP-SEOUL-00009847 – 9917].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 8 (Decision Granting Institution of Inter Partes Review Under 35 U.S.C. § 314), 8-26 (P.T.A.B. Aug. 10, 2020) [TCP-SEOUL-00009918 – 9949].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 17 (Patent Owner Response), 4-13, 27-33, 59-80 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009624 – 9712].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 19 (Patent Owner's Motion to Amend Under 37 C.F.R. § 42.121), 4-25 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009713 – 9749].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 32 (Preliminary Guidance Patent Owner's	

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			Motion to Amend), 5-11 (P.T.A.B. Mar. 4, 2021) [TCP-SEOUL-00009750 – 9761].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 43 (Patent Owner's Sur-Reply to Petitioner's Reply to Board's Preliminary Guidance Patent Owner's Motion to Amend), 2-12 (P.T.A.B. Apr. 26, 2021) [TCP-SEOUL-00009762 – 9784].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 47 (Final Written Decision), 3-5, 9-37, 44-58 (P.T.A.B. Jul. 21, 2021) [TCP-SEOUL-00009785 – 9846].	
			U.S. Patent No. 8,829,552 File History at TCP-SEOUL-00008821 – 8832, TCP-SEOUL-00008847 – 8857, TCP-SEOUL-00008861 – 8868.	
			U.S. Patent No. 8,558,270 File History at TCP-SEOUL-00008553 – 8561, TCP-SEOUL-00008592 – 8603.	
			U.S. Patent No. 7,964,943 File History at TCP-SEOUL-00008010 – 8019, TCP-SEOUL-00008027 – 8039, TCP-SEOUL-00008042, TCP-SEOUL-00008044 – 8051.	

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				U.S. Reissue Patent Application No. 16/953,254 File History at TCP-SEOUL-00009401, TCP-SEOUL-00009439 – 9471, TCP-SEOUL-00009557 – 9617.	
14.	'967 17,20	a first undercut sidewall, a second undercut sidewall, and a third undercut sidewall that at least partially define a fixing space and interior portions of the first and second lead frames, the fixing space being formed by the undercut sidewalls of the first lead frame and the second lead frame	Plain and ordinary meaning, or alternatively the first and second lead frames each have at least three <i>undercut sidewalls</i> , with the spaces under the overhangs being a <i>fixing space</i> Figs. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7, 8; 2:5-18; 3:25-63; File History at SEOUL 001785-816; 001840-43; 001867-85; 001946-58; Paper No. 47 in <i>Satco Products, Inc. v. Seoul Semiconductor</i> , IPR2020-00410	Indefinite '967 Patent at Abstract, 1:26-31, 1:66-2:4, 2:5-18, 2:29-31, 2:43-61, 3:25-63, 4:6-23, 4:39-5:5, 5:9-15, 5:43-6:19, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Original Claims 1, 2, 6, 9, 10, 14, Amended Claims 17-22. '967 Patent File History at TCP-SEOUL-00005781 – 5788, TCP-SEOUL-00005841 – 5850, TCP-SEOUL-00005862 – 5871, TCP-SEOUL-00005910 – 5924, TCP-SEOUL-00005956 – 5968, TCP-SEOUL-00005956 – 5968, TCP-SEOUL-00006027 – 6045, TCP-SEOUL-00006100 – 6131, TCP-SEOUL-00006133 – 6136. Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 7 (Patent Owner's Preliminary Response Under 37 C.F.R. § 42.107), 10-28, 37-61 (P.T.A.B. May 12, 2020) [TCP-SEOUL-00009847 – 9917]. Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 8 (Decision Granting Institution of Inter	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			Partes Review Under 35 U.S.C. § 314), 8-26 (P.T.A.B. Aug. 10, 2020) [TCP-SEOUL-00009918 – 9949].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 17 (Patent Owner Response), 4-13, 27-33, 59-80 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009624 – 9712].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 19 (Patent Owner's Motion to Amend Under 37 C.F.R. § 42.121), 4-25 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009713 – 9749].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 32 (Preliminary Guidance Patent Owner's Motion to Amend), 5-11 (P.T.A.B. Mar. 4, 2021) [TCP-SEOUL-00009750 – 9761].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 43 (Patent Owner's Sur-Reply to Petitioner's Reply to Board's Preliminary Guidance Patent Owner's Motion to Amend), 2-12 (P.T.A.B. Apr. 26, 2021) [TCP-SEOUL-00009762 – 9784].	
			Satco Prods., Inc. v. Seoul Semiconductor	

Patent No Claim(s)	Lerm/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			Co., Ltd., No. IPR2020-00410, Paper 47 (Final Written Decision), 3-5, 9-37, 44-58 (P.T.A.B. Jul. 21, 2021) [TCP-SEOUL-00009785 – 9846].	
			'821 Patent File History at TCP-SEOUL- 00005666 – 5671, TCP-SEOUL- 00005683 – 5690, TCP-SEOUL- 00005694 – 5701.	
			U.S. Patent No. 8,829,552 File History at TCP-SEOUL-00008821 – 8832, TCP-SEOUL-00008847 – 8857, TCP-SEOUL-00008861 – 8868.	
			U.S. Patent No. 8,558,270 File History at TCP-SEOUL-00008553 – 8561, TCP-SEOUL-00008592 – 8603, TCP-SEOUL-00008715 – 8723, TCP-SEOUL-00008727 – 8734.	
			U.S. Patent No. 7,964,943 File History at TCP-SEOUL-00008010 – 8019, TCP-SEOUL-00008027 – 8039, TCP-SEOUL-00008042, TCP-SEOUL-00008044 – 8051.	
			U.S. Reissue Patent Application No. 16/953,254 File History at TCP-SEOUL-00009401, TCP-SEOUL-00009439 – 9471, TCP-SEOUL-00009557 – 9617.	
15. '967	each fixing hole	Plain and ordinary meaning, or	Indefinite	Construction of this term may

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
17,20	includes an undercut sidewall that envelopes inner bounds of the fixing hole	alternatively the shape of the interior volume within each <i>fixing hole</i> includes an undercut Figs. 4, 5, 6A, 6B, 7, 8; 4:33-67; File History at SEOUL 001785-816; 001840-43; 001867-85; 001946-58; Paper No. 47 in <i>Satco Products, Inc. v.</i> Seoul Semiconductor, IPR2020-00410	'967 Patent at Abstract, 1:26-31, 1:66-2:4, 2:5-18, 2:29-31, 2:43-61, 3:25-63, 4:6-23, 4:39-5:5, 5:9-15, 5:43-6:19, FIGS. 1, 2, 3A, 3B, 4, 5, 6A, 6B, 7-9, Claims 1, 2, 6, 9, 10, 14, Amended Claims 17-22. '967 Patent File History at TCP-SEOUL-00005781 – 5788, TCP-SEOUL-00005841 – 5850, TCP-SEOUL-00005862 – 5871, TCP-SEOUL-00005910 – 5924, TCP-SEOUL-00006133 – 6136. Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 7 (Patent Owner's Preliminary Response Under 37 C.F.R. § 42.107), 10-28, 37-61 (P.T.A.B. May 12, 2020) [TCP-SEOUL-00009847 – 9917]. Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 8 (Decision Granting Institution of Inter Partes Review Under 35 U.S.C. § 314), 8-26 (P.T.A.B. Aug. 10, 2020) [TCP-SEOUL-00009918 – 9949]. Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 17 (Patent Owner Response), 4-13, 27-33, 59-80 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009624 – 9712].	impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 19 (Patent Owner's Motion to Amend Under 37 C.F.R. § 42.121), 4-25 (P.T.A.B. Nov. 16, 2020) [TCP-SEOUL-00009713 – 9749].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 32 (Preliminary Guidance Patent Owner's Motion to Amend), 5-11 (P.T.A.B. Mar. 4, 2021) [TCP-SEOUL-00009750 – 9761].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 43 (Patent Owner's Sur-Reply to Petitioner's Reply to Board's Preliminary Guidance Patent Owner's Motion to Amend), 2-12 (P.T.A.B. Apr. 26, 2021) [TCP-SEOUL-00009762 – 9784].	
			Satco Prods., Inc. v. Seoul Semiconductor Co., Ltd., No. IPR2020-00410, Paper 47 (Final Written Decision), 3-5, 9-37, 44-58 (P.T.A.B. Jul. 21, 2021) [TCP-SEOUL-00009785 – 9846].	
			'821 Patent File History at TCP-SEOUL- 00005666 – 5671, TCP-SEOUL- 00005683 – 5690, TCP-SEOUL- 00005694 – 5701.	

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				U.S. Patent No. 8,829,552 File History at TCP-SEOUL-00008821 – 8832, TCP-SEOUL-00008847 – 8857, TCP-SEOUL-00008861 – 8868.	
				U.S. Patent No. 8,558,270 File History at TCP-SEOUL-00008553 – 8561, TCP-SEOUL-00008592 – 8603.	
				U.S. Patent No. 7,964,943 File History at TCP-SEOUL-00008010 – 8019, TCP-SEOUL-00008027 – 8039, TCP-SEOUL-00008042, TCP-SEOUL-00008044 – 8051.	
				U.S. Reissue Patent Application No. 16/953,254 File History at TCP-SEOUL-00009401, TCP-SEOUL-00009439 – 9471, TCP-SEOUL-00009557 – 9617.	
16.	'496 1,11	a plurality of thick film layers	Plain and ordinary meaning, or alternatively	"a plurality of layers having a thickness between 1.5 nm and 3 nm."	Construction of this term may impact validity/invalidity and/or
			semiconductor layers each having a thickness greater than the [thin film layers]	'496 Patent at 3:37-4:9, 5:1-5, 6:60-7:8, 7:28-37, 12:6-25, Claims 1, 2, 5, 7, 10.	infringement/non-infringement, and may assist the jury.
			Figs. 1B, 2, 3A, 3B; Abstract; 1:47-65; 3:37-4:24; 7:28-42		
17.	'496 1,11	a plurality of thin film layers	Plain and ordinary meaning, or alternatively	"a plurality of layers having a thickness less than 1.5 nm"	Construction of this term may impact validity/invalidity and/or
			semiconductor layers each having	'496 Patent at 3:37-4:9, 6:60-7:8, 7:28-37,	infringement/non-infringement, and

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
			[thickness not more than a thickness of the thick film layers]	12:6-25, Claims 1, 10.	may assist the jury.
			Figs. 1B, 2, 3A, 3B; Abstract; 1:47-65; 3:37-4:24; 7:28-42		
18.	'496 1,4,9,13,18	well layer	Plain and ordinary meaning, or alternatively a layer of semiconductor material having a lower bandgap than its [n-side barrier layer] and [p-side barrier layer]	Indefinite '496 Patent at 3:29-33, 4:43-67, 5:6-11, 5:19-39, 7:5-8, 9:12-35, 10:3-18, 10:25-36, 12:29-46, FIGS. 1A, 1B, 2, 3A, 3B, Claims 1, 4, 9, 18, 20.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
			Figs. 1B, 2, 3A, 3B; Abstract, 1:47-65; 2:62-33; 4:31-5:39; 9:8-10:47		
19.	'933 15	the molding part is made of materials including at least one of silicone, epoxy, polymethylmethacrylate (PMMA), polyethylene (PE) and polystyrene (PS)	Plain and ordinary meaning, or alternatively the molding part is made of one or more of silicone, epoxy, polymethylmethacrylate, polyethylene and polystyrene 4:20-34; 7:4-25	"the molding part is made of materials including at least one silicone epoxy, at least one polymethylmethacrylate (PMMA), at least one polyethylene (PE) and at least one polystyrene (PS)" '933 Patent at 4:27-32, 7:9-12, 20:19-21, 22:19-21; FIGS. 1-10 and 14B.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
20.	'933 15	less than or equal to about 40 nm	Plain and ordinary meaning, or alternatively a width having an upper bound of approximately 40 nanometers 7:26-348:24-33; 13:43-52 a range having ends at	"less than or equal to 40 nm" "ranges from 520 nm to 570 nm" "ranges from 600 nm to 670 nm" '933 Patent at 2:31-34, 2:56-62, 5:7-12, 7:29-31, 7:39-42, 8:7-10, 8:25-27, 13:11-13, 13:32-35, 13:44-4613:53-59, 20:25-	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
		nm to 570 nm ranges from about 600 nm to 670 nm	approximately 520 nanometers and approximately 570 nanometers a range having ends at approximately 600 nanometers and approximately 670 nanometers 2:31-34; 7:39-54; 20:23-33	33.	
21.	'836 1	user interface member	Plain and ordinary meaning, or alternatively an interface for user input Figs. 2, 8, 11, 12, 13, 14; 2:3-36; 8:35-67; 12:58-13:54	Indefinite '836 Patent at 2:3-7, 2:22-25, 2:31-36, 3:12-16, 6:66-7:6, 8:35-66, 12:60-13:5, 13:28-36, 14:19-34, 14:65-12, FIGS. 2, 11, 13, 14. '836 File History at TCP-SEOUL- 00006526 – 6535, TCP-SEOUL- 00006544 – 6548, TCP-SEOUL- 00006564 – 6573, TCP-SEOUL- 00006578 – 6585.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
22.	'836 1	a second light emitter comprising at least one light emitting structure	Plain and ordinary meaning, or alternatively a structure including at least one light emitting device Figs. 1, 2, 3, 4, 5, 6, 9, 11, 14, 14; Abstract; 1:53-2:61; 6:64-8:55; 9:1-10:41; 10:42-11:62; 12:60-15:30	"a second light emitter comprising at least one infrared ray emitter" '836 Patent at 1:59-2:7, 2:49-61, 3:1-16, 6:28-63, 6:66-7:40, 7:54-61, 8:15-55, 9:1-16, 9:54-60, 11:14-24, 11:27-13:5, 13:15-15:30, FIGS. 2, 3, 7-14. '836 File History at TCP-SEOUL-000065211 – 6516, TCP-SEOUL-00006526 – 6535, TCP-SEOUL-00006544 – 6548, TCP-	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

	Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
				SEOUL-00006564 – 6573, TCP-SEOUL-00006578 – 6585.	
23.	'314 3	wherein one of the plurality of portions of the first extension is disposed between the plurality of portions of the second extension	Plain and ordinary meaning, or alternatively at least one of the [portions of the first extension] falls within the region between [portions of the second extension] Figs. 1, 3,10, 11, 13, 19a, 19b, 21; Abstract, 2:30-9:14; 10:43-54; 11; 18-12:40; 13:23-37; 15:23-16:55; 17:1-18:4; 18:21-34; 19:3-62; 22:1-57	Indefinite '314 Patent at 4:50-67, 10:43-53, 11:29- 44, 14:11-21, 19:23-37, 21:12-37, FIGS. 1, 3, 10, 11, 13, 19a, 19b, 20, 21, 24, Claim 3. '314 Patent File History at TCP-SEOUL- 00007645 – 7651, TCP-SEOUL- 00007631 – 7638, TCP-SEOUL- 00007599 – 7609.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
24.	'314 4	wherein one of the plurality of portions of the second extension is disposed between the plurality of portions of the first extension	Plain and ordinary meaning, or alternatively at least one of the [portions of the second extension] falls within the region between [portions of the first extension] Figs. 1, 3, 10, 11, 13, 19a, 19b, 21; Abstract, 2:30-9:14; 10:43-54; 11; 18-12:40; 13:23-37; 15:23-16:55; 17:1-18:4; 18:21-34; 19:3-62; 22:1-57	Indefinite '314 Patent at 4:50-67, 10:43-53, 11:29- 44, 14:11-21, 19:23-37, 21:12-37, FIGS. 1, 3, 10, 11, 13, 19a, 19b, 20, 21, 24, Claim 4. '314 Patent File History at TCP-SEOUL- 00007645 – 7651, TCP-SEOUL- 00007631 – 7638, TCP-SEOUL- 00007599 – 7609.	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.
25.	'314 1,5	second semiconductor layer	Plain and ordinary meaning, or alternatively a layer of semiconductor material	"a second semiconductor layer separate and distinct from the first semiconductor layer" '314 Patent at Abstract, 2:45-63, 2:64-3:3,	Construction of this term may impact validity/invalidity and/or infringement/non-infringement, and may assist the jury.

Patent No. Claim(s)	Term/Phrase	Plaintiffs' Proposed Construction & Intrinsic Support	Defendant's Proposed Construction & Intrinsic Support	Explanation of Why Resolution Makes a Difference by the Party Requesting a Construction
		Abstract, 2:45-9:14; 10:43-11:23	5:5-28, 5:29-35, 7:33-52, 7:53-8:4, 8:14-22, 8:40-60, 10:43-53, 10:59-11:7, 14:45-55, 15:23-44, 15:56-67, 17:1-13, 18:21-51, 19:3-17, 19:46-62, 20:33-41, 22:66-23:20, 23:40-61, 25:39-46, 25:52-26:2, 26:60-27:17, 28:21-32, FIGS. 2a, 2b, 2c, 4a, 4b, 4c, 5a, 5b, 5c, 6a, 6b, 6c, 7, 8, 9, 12a, 12b, 12c, 12d, 14a, 14b, 14c, 14d, 15a, 15b, 15c, 16a, 16b, 16c, 17, 18, 22, 23, 25, 26, Claims 1, 5, 14, 17.	
			'314 Patent File History at TCP-SEOUL- 00007645 – 7651, TCP-SEOUL- 00007631 – 7638, TCP-SEOUL- 00007599 – 7609.	
			U.S. Patent No. 9,520,536 File History at TCP-SEOUL-00010711 – 10720.	
			U.S. Patent No. 9,397,264 File History at TCP-SEOUL-00010535 – 10541.	
			U.S. Patent No. 8,987,772 File History at TCP-SEOUL-00011189 – 11195, TCP-SEOUL-00011171 – 11185, TCP-SEOUL-00011140 – 11155.	

AGREED CONSTRUCTIONS

	Patent No. Claim(s)	Term/Phrase	Joint Proposed Construction
1.	'800 1	wherein the dopant concentration of the first low-doped layer decreases with increasing distance from the intermediate doped layer and then increases with decreasing distance to the p-type contact layer	the dopant concentration within the first low-doped layer begins at a local high at the intermediate doped layer, falls to a low, and then increases to a local high at the p-type contact layer
2.	'800 14	the second low-doped layers include a hole concentration decreasing with increasing distance from the active layer and then increasing with decreasing distance to the doped layer	the hole concentration within the second low-doped layer begins at a local high at the active layer, falls to a low, and then increases to a local high at the doped layer
3.	'821	the resin	"the resin" in claim 2 refers back to the recitation "a resin portion" as recited in claim 1.
	2,5		"the resin" in claim 5 refers back to the recitation "a resin portion" as previously recited in claim 5.
4.	'496 1	functional part	[a plurality of active layers stacked in a direction from the n-type semiconductor layer toward the p-type semiconductor layer]
5.	'675 1,17,18	a thickness of the second converter is in a range of 0.07 mm to 1.5 mm	the second converter is at least 0.07 millimeters thick and no more than 1.5 millimeters thick
6.	'675 6	wherein a thickness of the second converter is in a range of 100 um to 1000 um	the second converter is at least 100 microns thick and no more than 1000 microns thick
7.	'675 8,16,20	wherein the light emission spectrum of the phosphors of the first converter includes at least one wavelength region where a portion of each light emission spectrum overlaps another light emission spectrum	the first plurality of phosphors each have an emission spectrum, and those emission spectra overlap
8.	'675	half-value width	full width at half maximum

	Patent No. Claim(s)	Term/Phrase	Joint Proposed Construction
9.	'314 5	wherein the second extension extend toward the first electrode pad and has a curved shape near the first electrode pad	the second extension extends [from the second electrode pad] in the direction of [the first electrode pad] and curves near the end
10.	'314 1,5	in contact with	touching